THE MARYLAND
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Maryland Agricultural College, College Park, Md.

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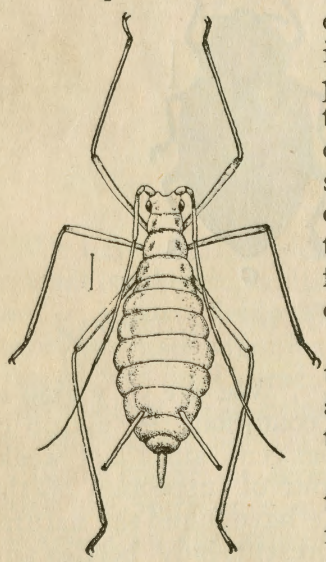
An Account of the Destructive Green Pea Louse, and Suggestions for Its Destruction.

By Willis G. Johnson, State Entomologist.

This insect has been known to science about one year, in fact, received a scientific name in February 1900. It was described by the writer as the destructive green pea louse, *Nectarophora destructor*. It is one of the most important economic pests and is now commanding the close attention of growers of peas for commercial purposes all over the country. The writer has been in communication with the most extensive growers in the United States during the past few weeks. To meet the current demand for the latest information on this topic this revised circular is issued.



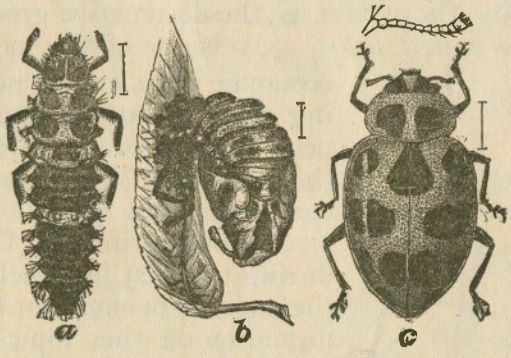
Wingless Female

The pea louse has been present in the open fields in certain localities, and it is of the utmost importance that growers should be on their guard

There are two forms of the insect; the wingless female is shown in the figure while the winged form is represented on page 4. No male has as yet been found. The female produces living young which reach maturity in from ten to 15 days, possibly less time in hot weather. As an example a young one born March 4, reached maturity (winged form) March 16, or 12 days from time of birth and was producing living young

on the 19th. From March 19 to April 17 she become the mother of 111 young and died on the latter date. Her first young (wingless form) born March 19 was producing on March 31, or 11 days from time of birth. From March 31 to April 18, she gave birth to 120 young and died.

If permitted to breed unchecked, this pest sweeps over a large area in a very short time. The first louse upon peas in the open field was discovered April 28th in Caroline county May 1st it was difficult to detect them on the plants, but the pests multiplied so rapidly some pea fields were yellowish, dwarfed and shriveled, even dead by May 23. This condition existed where the peas were broadcast and in rows where nothing had been done to check and control the pest. Other rows where the brush, cultivator, pan, and roasting method had been used persistently, were in a green vigorous condition set full of peas. At that time, May 23, the outlook



Lady Beetle and Its Young. (After Chittenden).

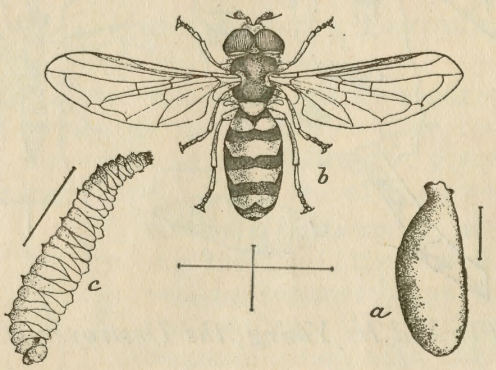
in the state, was very discouraging. We are very glad to report at the present time that the conditions for a crop of late peas have improved fully 25 per cent since last week.

We have just returned from a tour of inspection of the principal pea fields of the state. We have found the natural enemies of the lice, everywhere present, lady beetles and their larvæ, the lace winged fly and its larvæ, the Syrphus fly and its young, and soldier beetles are abundant in nearly all fields. The fungous disease we reported a few weeks ago, is present in both clover and pea fields. In clover, at some places, the lice are being destroyed by the thousands by this

disease. If the weather remains damp, warm and sultry, we fully expect to see a great many lice destroyed by this silent factor in the next few days.

It will not do however to place too much dependence in these natural destroyers. Every resource possible should be resorted to in order that the late crop of peas can be saved.

The brush and cultivator is still the most practical remedy where the peas are in rows. A long pan can be used in which the lice can be brushed when the peas are too large to admit of cultivtaion. This method has been used with success by A. G. Saulsbury and Bro., Ridgely, Md.

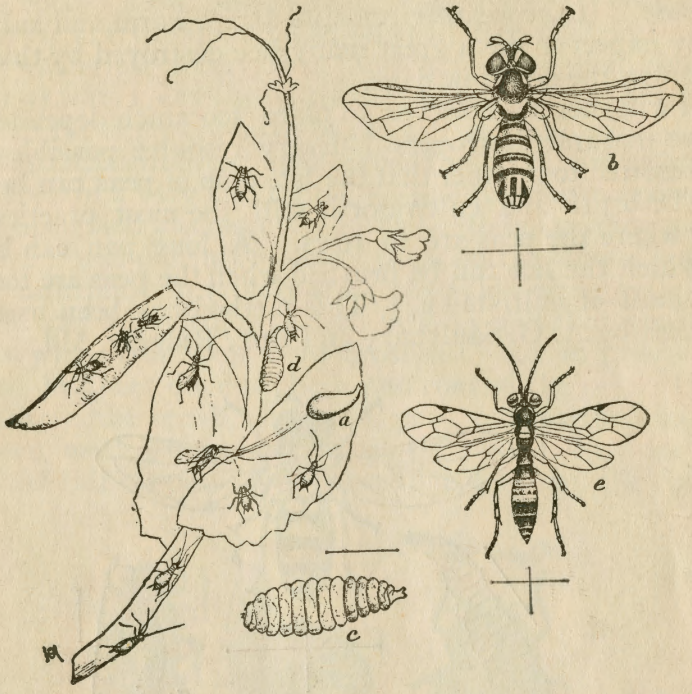


The American Syrphus Fly and Its Young.

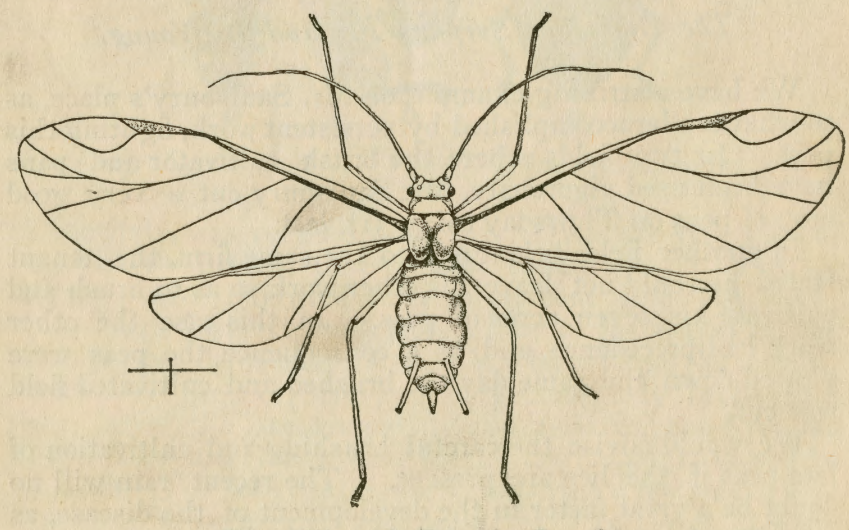
We have a striking example on Mr. Saulsbury's place, as to what can be accomplished by persistent work, fighting this pest. In two fields where the brush cultivator and pans have been used vigorously, Mr. Saulsbury cut a very good crop of peas on Thursday (May 31), last.

In another field belonging to the same firm, the tenant stated he could not leave his other work so as to brush and cultivate his seven acres of peas. In this case the other work had precedence, and as a consequence the peas were plowed down the same day the brushed and cultivated field was cut.

We would advise the carefnl brushing and cultivation of late peas if the lice are present. The recent rain will no doubt be a great factor in the development of the disease, as as well as stimulate the plant making it better able to resist the attack of the louse.



Syrphus Fly and Its Young, the Destroyer of the Pea Louse



The Winged Female Pea Louse.